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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/825,028	04/15/2004	Steven V. Jones	BR8843	7480

7590 02/01/2005

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EXAMINER	
SHARP, JEFFREY ANDREW	
ART UNIT	**PAPER NUMBER**
3677	

DATE MAILED: 02/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/825,028	JONES ET AL.	
	Examiner	Art Unit	
	Jeffrey Sharp	3677	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 April 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-11* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-11* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *15 April 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Status of Claims

[1] Claims 1-11 are pending.

Specification

[2] The disclosure is objected to because of the following informalities:

The specification (paragraphs [0008] and [0017]) mentions *'between 50 and 80 shore hardness and preferably between 60 and 70 shore hardness'*. Applicant is advised to specify whether the durometer is measured based on the Shore A or Shore D scale.

Appropriate correction is required..

Claim Objections

[3] Claims 5-10 are objected to because of the following informalities:

Claims 5-10 objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from any other multiple dependent claim. See MPEP § 608.01(n). In the instant case, claim 4 is already a multiple dependent claim. Accordingly, for compact prosecution in a timely manner, the claims have been treated on their merits, but *only* as they are dependent on claim 1.

Claims 6 and 7 do not specify Shore A or Shore D scale.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

[4] The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

[5] Claim 11 rejected under 35 U.S.C. 112, second paragraph, as being indefinite in that it fails to point out what is included or excluded by the claim language. This claim is an omnibus type claim. This claim has not been further treated on its merits.

Claim Rejections - 35 USC § 103

[6] The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

[7] Claims 1-10 rejected under 35 U.S.C. 103(a) as being unpatentable over Bell US-3,553,040 in view of King Jr. 4,164,807 and Siebol US-4,170,920.

Bell teaches substantially all of the claimed limitations (disclosed in Applicant's admission of prior art), except for a **shoulder** and **body adjacent the flange** that has a larger external diameter than the tail end, and a **cylindrical sleeve of resilient material.**

King Jr. (Figures 13 and 14) teaches an enlarged **'shoulder-forming' cylindrical body** (116) adjacent a flange (115) for the purpose of maintaining a member (P1) having a larger internal diameter (H2) than that of internal diameter of a panel (P2) between the flange (115) and

the panel (P2). The increased external diameter portion (116) adjacent the flange (115) further prevents over-insertion of the body (110) into the panel (P2).

Siebol teaches a **cylindrical sleeve of resilient material** (31, 92) disposed about the increased diameter portion (22, 86), and under the flange (24, 84) of the body of a blind fastener for advantageous sealing purposes, but the sleeve *could* be configured with an axial length sufficient to be used as a stopper in an electrical car window motor setup. The sleeve has an external diameter smaller than the flange (24, 84) (pertinent to the instant claim 3), and an internal diameter larger both the increased diameter portion (22, 86) and tail end. Elastomeric and polymeric sleeves and coatings on rivets are known in the art. See also, GB-2,302,148.

At the time of invention, it would have been obvious to one of ordinary skill in the art to modify the common blind fastener taught by Bell and admitted by Applicant as prior art, to include the larger shoulder portion taught by King Jr., in order to prevent over-insertion of the fastener body into a panel aperture. It would have also been obvious to place a cylindrical sleeve of resilient material under the flange and disposed about the larger diameter body portion adjacent the flange as suggested by Siebol, in order to increase the sealing or vibration damping characteristics of the fastener (see US-4,921,371).

As for claims 7 and 8, the Applicant does not specify whether the shore hardness is on the Shore A or Shore D scale (see above claim objections). Regardless, it would be recognized by those of ordinary skill in the art that automotive elastomeric and polymeric materials suitable for the intended application fall within these durometer ranges (e.g., tire treads, wiper blades, door seals) for the durometer A scale. Polypropylene (soft plastic which would also suit) falls within this range on the durometer D scale. Further, it has been held to be within the general skill of a

worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin, 125 USPQ 416.* It would be obvious, for example, to use a material that has optimum sound-dampening characteristics in situations where low ambient noise levels are appreciated.

[8] Claims 1-10 rejected under 35 U.S.C. 103(a) as being unpatentable over Gaquere US-5,581,867 in view of Siebol US-4,170,920.

Gaquere (refer to Figures 10-13) teaches: a blind fastener comprising:

1) an enlarged flange (450),

2) a tail end (441, 541, 444) having an external diameter 'x', and internal diameter 'y',

3) an enlarged 'shoulder-forming' cylindrical body adjacent the flange (463) having an external diameter 'X' and internal diameter 'Y',

4) the internal diameter 'y' of the tail end engaging the mandrel frictionally,

5) the internal diameter 'Y' of the body adjacent the flange capable of being greater than 'y', to decrease the pull force of the mandrel, as is known in the art (see Kraemer US-4,585,383),

6) the external diameter 'X' being larger than 'x' by about 1.4 or more times -- enough to sufficiently provide a means to limit further insertion into the panel.

7) the bottom of body being adjacent the flange (463) and resting on panel (A) as a stop to limit further body insertion into the panels (A, B),

8) and the shoulder (bottom 463) being located between 25% and 75% of the body length remote from the flange end (i.e., middle 50%), said shoulder being perpendicular to the body axis.

However, Gaquere fails to disclose expressly a **cylindrical sleeve of resilient material** between the shoulder (463) and the enlarged flange (450).

Siebol teaches a **cylindrical sleeve of resilient material** (31, 92) disposed about the increased diameter portion (22, 86) of the body of a blind fastener for advantageous sealing purposes, but the sleeve *could* be configured with an axial length sufficient to be used as a stopper in an electrical car window motor setup. The sleeve has an external diameter smaller than the flange (pertinent to the instant claim 3). Elastomeric and polymeric sleeves and coatings on rivets are known in the art. See also, GB-2,302,148.

Note that both Gaquere and Siebol teach the larger cylindrical body (adjacent the flange) to be around 1.4 times or more the external diameter of the smaller tail end. See MPEP 2144.04 section IV, *'Changes in size/proportion'* and *'Changes in shape'*.

At the time of invention, it would have been obvious to one of ordinary skill in the art to put a **cylindrical sleeve of resilient material** under the flange of the blind fastener taught by Gaquere, as suggested by Siebol, in order to improve the sealing capabilities. The sleeve could be configured by one of ordinary skill in the art to serve as an 'energy-absorbing stop', or anti-vibration means (US-4,921,371). It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham, 2 USPQ2d 1647 (1987).* The shoulder disclosed by Gaquere advantageously provides an additional bearing surface that would improve the holding power of the fastener under side loading or shear loads parallel to the plane of the panel. In other words, the rivet would be less likely to shear under a cantilevered torque load. The shoulder disclosed by Gaquere would also

provide ample clearance for a very thick cylindrical sleeve of resilient material to be retained under the flange and between a panel.

As for claims 7 and 8, the Applicant does not specify whether the shore hardness is on the Shore A or Shore D scale (see above claim objections). Regardless, it would be recognized by those of ordinary skill in the art that automotive elastomeric and polymeric materials suitable for the intended application fall within these durometer ranges (e.g., tire treads, wiper blades, door seals) for the durometer A scale. Polypropylene (soft plastic which would also suit) falls within this range on the durometer D scale. Further, it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin, 125 USPQ 416.* It would be obvious, for example, to use a material that has optimum sound-dampening characteristics in situations where low ambient noise levels are appreciated.

Conclusion

[9] The prior art made of record and not relied upon is considered pertinent to applicant's disclosure is as follows:

US 3747466 A	USPAT	Rosman; Irwin E.
US 4039099 A	USPAT	Boxall; Charles W.
US 4074608 A	USPAT	Siebol; George
US 4170919 A	USPAT	Siebol; George
US 4521147 A	USPAT	King, Jr.; John O. et al.
US 4580936 A	USPAT	Francis; Albert C. et al.
US 4585383 A	USPAT	Kraemer; Ludwig
US 4639175 A	USPAT	Wollar; Burnell J.
US 4840522 A	USPAT	Kurihara; Kazumasa
US 4921371 A	USPAT	Boiraeu; Christian et al.
US 5320465 A	USPAT	Smith; Daniel R.

US 5915901 A	USPAT	Aasgaard; A. L. Pepper
US 6183179 B1	USPAT	Gaquere; Jean-Pierre
US 20020119025 A1	US-PGPUB	Wirth, Klaus et al.
US 6749384 B1	USPAT	Ellis; Thomas J.
US 6632056 B1	USPAT	Lind; Stefan
US 6499926 B2	USPAT	Keener; Steven G.
US 5848801 A	USPAT	Hirt; Dieter
US 5826376 A	USPAT	Yamamoto; Hiroyuki et al.
US 5015136 A	USPAT	Vetter; Gregory J. et al.
US 5009557 A	USPAT	Dessirier; Charles
US 4687398 A	USPAT	Berecz; Imre
US 4687397 A	USPAT	Berecz; Imre
US 4609315 A	USPAT	Briles; Franklin S.
US 4363580 A	USPAT	Bell; John H.
US 4202243 A	USPAT	Leonhardt; Robert F.
US 4112993 A	USPAT	Dey; Ervin J.
US 4104952 A	USPAT	Brass; Robert L.
US 3505923 A	USPAT	NEILL WILLIAM J
US 2562336 A	USPAT	SELDEN ROBERT G
US 2040939 A	USPAT	HUCK LOUIS C
US 0483806 A	USPAT	HULL, W. S.
US 0422824 A	USPAT	Peck, I. F.
US 0346476 A	USPAT	Henius, M. W.

[10] Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey Sharp whose telephone number is (703) 305-0426. The examiner can normally be reached on 7:30 am - 5:00 pm Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J.J. Swann can be reached on (703) 306-4115. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JAS

ROBERT J. SANDY
PRIMARY EXAMINER